<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>KSPE 6000</td>
<td>Movement Education</td>
<td>3-0-3</td>
<td>A practical approach to movement education. Emphasis is placed on accountability, program planning, discovery, learning-teaching methods, and the design, construction and installation of low cost equipment. Individualization of success experiences for all children is a major portion of the program.</td>
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<tr>
<td>KSPE 6500</td>
<td>Workshop in Coaching Athletics</td>
<td>3-0-3</td>
<td>A workshop dealing with the techniques and strategies of football, basketball, baseball, and track. General topics relating to the psychology of coaching to administrator’s problems and to physiological principles are also covered.</td>
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<tr>
<td>KSPE 7000</td>
<td>Health Education for Early Childhood and Middle Grades Teachers</td>
<td>3-0-3</td>
<td><strong>Prerequisite:</strong> KSPE 4100 or permission of instructor. The advanced study of the school health program with special attention given to meeting cognitive and affective objectives in health instruction.</td>
</tr>
<tr>
<td>KSPE 7010</td>
<td>Exercise Physiology</td>
<td>2-2-3</td>
<td>Principles of physiology with special emphasis on the integration of organ systems in adapting to the requirements of muscular activity during exercise.</td>
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<tr>
<td>KSPE 7020</td>
<td>Scientific Analysis of Human Movement</td>
<td>2-2-3</td>
<td>Mechanical analysis of motor skills with special emphasis on the laws of physics and their application to physical education and athletics.</td>
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<tr>
<td>KSPE 7030</td>
<td>Applied Structural Anatomy and Kinesiology</td>
<td>2-2-3</td>
<td><strong>Prerequisite:</strong> BIOL 2651. In-depth study of the human structural and neuromuscular anatomy. Special emphasis is placed upon analysis of the extremities and joint structures as related to sport, injury conditions, and exercise prescriptions.</td>
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<tr>
<td>KSPE 7040</td>
<td>Motor Learning</td>
<td>3-0-3</td>
<td>Theories of learning and other psychological principles that relate to the mastery of motor skills are explored. Current research in both educational psychology and physical education is investigated.</td>
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<tr>
<td>KSPE 7050</td>
<td>Advanced Exercise Testing and Prescription for Various Populations</td>
<td>3-0-3</td>
<td><strong>Prerequisite:</strong> KSPE 3011 or equivalent or permission of the instructor. An advanced concentrated study of KSPE 3011. Topics include various exercise testing protocols for specific populations, radionuclide techniques, predictive implications, value a screening tool, problems related to exercise electrocardiogram, interpretation, and exercise recommendations and prescription.</td>
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<tr>
<td>KSPE 7060</td>
<td>Exercise Electrocardiography</td>
<td>3-0-3</td>
<td><strong>Prerequisite:</strong> BIOL 2652. A basic understanding of the 12-lead electrocardiogram as it relates to graded exercise testing, training, and functional evaluation. The course is designed particularly to assist the clinical exercise physiologist in developing the skills required for quickly identifying electrocardiographic patterns at rest and during exercise.</td>
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<tr>
<td>KSPE 7070</td>
<td>Sports Nutrition</td>
<td>3-0-3</td>
<td><strong>Prerequisite:</strong> KSPE 3200 or permission of instructor. Emphasizes the application of nutritional concepts to sport and physical activity. Included will be information relative to dietary modifications for optimal athletic performance.</td>
</tr>
<tr>
<td>KSPE 7080</td>
<td>Sport-Related Illnesses and Conditions</td>
<td>3-0-3</td>
<td>Designed to provide an in-depth investigation and study of sport related illnesses and conditions. The course will also study proper techniques and methodologies of assessing and managing these illnesses and conditions.</td>
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<tr>
<td>KSPE 7090</td>
<td>Health in the Social Community</td>
<td>3-0-3</td>
<td><strong>Prerequisite:</strong> KSPE 4100 or permission of instructor. Designed to acquaint the student with health programs in the community and how an individual may avail him/herself of the programs.</td>
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</table>
KSPE 7100 Exercise Cardiovascular Physiology 3-0-3
Prerequisite: KSPE 3420. A concentrated study in exercise physiology of the healthy and diseased heart. Emphasis is placed on normal versus abnormal conditions and their effect on exercise testing and training and myocardial adaptations under conditions of acute and chronic exercise.

KSPE 7110 Adapted Developmental Physical Education 3-0-3
Promotes an understanding of special physical education with emphasis on the handicapped person and the role of competitive sport for handicapped and disabled individuals.

KSPE 7120 Physical Education Pedagogy 3-0-3
Provides the student with opportunities to research and apply a variety of teaching models and teaching methodologies in addition to related instructional practices associated with physical education.

KSPE 7130 Curriculum in Physical Education 3-0-3
Criteria and methods of curriculum construction as they apply to health education and physical education are examined. The modern conceptual approach and its implication on the physical education and health education program P-12 are also explored.

KSPE 7140 Physical Education for Early and Middle Childhood Teachers 3-0-3
Examines the growth and developmental patterns of children and how physical education programs and activities are developed for students preschool through grade eight. How the physical education program integrates with the total school program and curriculum is also discussed. This class is for early childhood and middle grades classroom teachers, not physical education majors.

KSPE 7150 Evaluation in Physical Education 3-0-3
Techniques of evaluation in physical education are investigated and a critical analysis of evaluation tools used in research is made.

KSPE 7200 Contemporary Issues in Health and Physical Education 3-0-3
An exhaustive inquiry and discussion of contemporary personal, public health and physical education issues at the local, national, and international levels with special emphasis on the effects of these issues on health and physical education.

KSPE 7210 History and Philosophy of Physical Education 3-0-3
The development of current attitudes and beliefs in the field of Health and Physical Education are traced and analyzed.

KSPE 7220 Sociology of Sport 3-0-3
The relationship between sport and culture is explored and sport’s effect on human relations is analyzed.

KSPE 7230 Psychology of Sport 3-0-3
The relationship between sport and pertinent psychological principles is investigated. In-depth analysis of research in the area is also undertaken.

KSPE 7240 Organization and Administration of Physical Education 3-0-3
Current organizational patterns and administrative techniques are analyzed and applications to practical situations are stressed.

KSPE 7250 Ethics in Sports 3-0-3
An investigation of the ethical issues involved in sports and society. This investigation will proceed by applying philosophical techniques in ethical problem-solving. The course will consider what these problems are, how they arise, and possibilities for how they may be solved.

KSPE 7300 Special Topics in Physical Education 1-0-1 to 6-0-6
Prerequisite: Permission of the instructor. Permits the development of special topics or issues in the areas of health, physical education, health education, health fitness, and sports medicine.
KSPE 7400  Directed Study in Health Sciences and Physical Education  1-0-1 to 6-0-6
Prerequisite: Approval of Area Coordinator, Graduate Coordinator and Department Head. Development and in-depth study of an approved topic of interest pertinent to the fields of health sciences and physical education but not currently offered within the existing program.

KSPE 7700  Advanced Organization and Management of Health, Fitness, and Sports Medicine Facilities  3-0-3
Examines and discusses currently accepted management and organizational techniques and philosophies in the areas of health, fitness, and sports medicine facilities.

KSPE 7900  Internship  1-0-1 to 6-0-6
Prerequisite: Approval of advisor, Program Coordinator, Graduate Coordinator, and Department Head. Provides the student with an opportunity to apply what they have learned in the classroom to actual working situations, as well as learn from professionals they will work with in the field.

KSPE 7910  Professional Development Seminar  2-0-2
Prerequisite: Completion of education core and courses in area of concentration. Serves as an introspective and retrospective look at the student’s program of study. It may also serve as the opportunity for an exit interview.

KSPE 7999  Research and Thesis  1-0-1 to 6-0-6
For students developing and writing a thesis and as recommended and approved by the student’s thesis advisor.

LEAD: EDUCATIONAL LEADERSHIP

LEAD 7010  Ethics and Issues in Educational Leadership  3-0-3
A study with emphasis on its application to contemporary issues in the field of educational leadership.

LEAD 7100  Educational Leadership  3-0-3
An examination of the application of the processes of interpersonal relations and effective leadership and their relationship to successful school programs.

LEAD 7200  Principles of Curriculum and Instruction for Educational Leaders  3-0-3
Prerequisite: RSCH 7100, LEAD 7210. An examination of curriculum development and contemporary changes as they relate to social aims, learner characteristics, and social problems. Existing research in the area of curriculum and instruction pertinent to educational leaders is critiqued. Emphasis is on curriculum and instruction foundations, design, basic concepts, theory, and trends of curriculum from early childhood through secondary levels.

LEAD 7210  Ethics and Laws  1-0-1
Review of the major statutes and litigation affecting educational and educational-related areas as well as ethical decision-making practices. Emphasis is on information about professional ethics and behavior appropriate to educational and educationally-related settings.

LEAD 7300  Fiscal and Facilities Management for Educational Leaders  3-0-3
Prerequisite: RSCH 7100, LEAD 7210. Content covers the area of financing of school corporations in the current economic and political setting, with emphasis on interrelationships of educational, economic, and political decisions. Applications of school business management practices to support such services as transportation, food service, plant services are analyzed.

LEAD 7400  Legal Issues for Educational Leaders  3-0-3
Prerequisite: RSCH 7100, LEAD 7210, LEAD 7100. An overview of the legal structure of education, liability, constitutional rights, contractual relationships, federal and state regulations, collective action, and special education rules and regulations is provided. Historical perspective in law and education with in-depth review of case law, showing the evolution of courts as educational policy makers.
LEAD 7500  Human Resource Management and Development 3-0-3
Examination of the recruitment, selection, and induction of new employees; Faculty development and evaluation; laws relating to employment practices; and interpersonal skills involved in student, staff, and community relationships.

LEAD 7650  Leadership Issues in Higher Education 3-0-3
Prerequisite: LEAD 7010, LEAD 7210, LEAD 7100, RSCH 7100. The processes of effective leadership and their relationship to the success of educational and educationally-related programs at the community level will be analyzed. Organization and administration of relevant settings with a focus on the competencies necessary for leadership and management at the community level.

LEAD 7700  Supervision of Instructional Programs 3-0-3
Study of the knowledge and skills necessary for the effective and efficient supervision of instructional programs. A variety of supervisory models will be employed. Knowledge of learning, teaching, and student development will be stressed as a basis for making supervisory decisions.

LEAD 7795  Professional Seminar in Pupil Personnel Services 1-0-1
Corequisite Courses: PSYC 7795 and SOWK 7850. Designed for professionals holding a certificate, or are certificate eligible, in school counseling, school psychology, or school social work. The role and function of each service area are explicated, developed, and validated within a collaboratively instructed forum.

LEAD 7800  Organization and Governance of Higher Education 3-0-3
An introduction to the organization of post-secondary institutions, the governance of these institutions, and the day-to-day as well as the long term administration of such institutions. This course is appropriate for those who are now or will be working in post secondary education at any level as it offers explanation and increased understanding of the organizational dynamics of institutions of higher education.

LEAD 7810  Finance and Budgeting in Higher Education 3-0-3
This course considers all sources of financing in higher education, the types and sources of student financial aid, budgeting, and cost effectiveness analysis. In addition, the articulation of each of these issues with the institution’s mission and goals is a major thrust of the course.

LEAD 7820  Assessment and Evaluation in Higher Education 3-0-3
An introduction to the concept of institutional effectiveness which focuses on an institution’s ability to use planning strategies and evaluation information to assess current performance and plan for improvements. The design and appropriate implementation of assessment and evaluation methods as they relate to addressing various accreditation standards will be examined. Examples of how to develop a comprehensive system of evaluation related to missions and goals will be described for academic and non-academic support units.

LEAD 7830  Law and Policy in Higher Education 3-0-3
This course is intended to familiarize students with statutory and case law that has implications for higher education administrators and policy makers with particular emphasis on such areas as employment, including affirmative action, dismissal, contracts, civil rights, due process, and student rights.

LEAD 7900  Internship in Educational Leadership I 3 hours credit
Prerequisite: Consent of instructor. A supervised field experience designed for the student to acquire and demonstrate appropriate educational leadership, administrative, and instructional supervision competencies.

LEAD 7910  Internship in Educational Leadership II 3 hours credit
A supervised field experience designed for the student to acquire and demonstrate appropriate educational leadership, administrative, and instructional supervision competencies.
LEAD 7921 Internship Preparation in Higher Education Leadership 3 hours credit
Prerequisite: Core courses and permission of advisor. A supervised internship relevant to the student’s program in post-secondary leadership is provided. This field experience is focused on acquiring first-hand knowledge of appropriate leadership, administrative, and management competencies at the post-secondary level.

LEAD 7922 Internship in Higher Education Leadership 3 hours credit
Prerequisite: LEAD 7921 and permission of advisor. A supervised internship relevant to the student’s program in post-secondary leadership is provided. This field experience is focused on developing appropriate leadership, administrative, and management competencies at the post-secondary level.

LEAD 7923 Advanced Internship in Higher Education Leadership 2 hours credit
Prerequisite: LEAD 7922 and permission of advisor. A supervised internship relevant to the student’s program in post-secondary leadership is provided. This field experience is focused on the demonstration of appropriate leadership, administrative, and management competencies.

LEAD 8200 School Reform and Change 3-0-3
Effective strategies and tactics for changing schools, varieties of school restructuring, and the individual and organization dynamics involved in change will be presented. Change and change strategies in formal and informal organizations are foci. Students will develop change strategies and apply them to selected situations.

LEAD 8300 Social Context of Educational Leadership 3-0-3
A retrospective contemporary and prospective examination of the social, cultural, political, and philosophical contexts from which the current issues that affect schools and schooling have evolved.

LEAD 8400 Organizational Theory for Educational Leaders 3-0-3
Prerequisite: RSCH 8000, LEAD 8200, LEAD 8300. A critical analysis of the theoretical assertions and empirical knowledge claims that have led to the dominant structures, power relationships, and performance expectations of American schools.

LEAD 8410 Special Education Law for Educational Leaders 3-0-3
Prerequisite: RSCH 8000. Introduction, for practicing and prospective school administrators, to the legal aspects of the education of students with disabilities. Includes statutes, case law, and administrative regulations pertaining to special education.

LEAD 8610 School, Community, and Media Relations for Educational Leaders 3-0-3
Prerequisite: RSCH 8000. This course examines school-community-media relationships and techniques of communication employed between the school and a variety of public groups. Typical situations in which conflict is present in educational and educationally-related settings are analyzed, with a focus on conflict management skill acquisition.

LEAD 8650 Personnel Issues and Consideration 3-0-3
Prerequisite: RSCH 8000, LEAD 8200, LEAD 8300, LEAD 8400, LEAD 8600. Role definitions of personnel supervision, analysis of role conflict, needs assessments, observation and diagnosis of teacher classroom performance, writing remedial plans, conducting post observation conferences, and evaluating performance will be discussed. Administration of school personnel policies and practices relating to professional staff, supporting staff, and students will be analyzed.

LEAD 8660 Business and Finance 3-0-3
Prerequisite: RSCH 8000, LEAD 7300. This course conveys the business and financial functions involved in managing schools, such as staffing, salary, scheduling, inventories, and accounting procedures. Development, implementation, and evaluation of financial resource and allocation systems will be examined.
LEAD 8670 Educational Facilities  3-0-3
Prerequisite: RSCH 8000, LEAD 7300 or appropriate ITED course. The design and administration of effective and economical educational facilities in relation to contemporary trends and conditions will be examined. Issues to be considered in the planning, construction, and use of educational facilities will be evaluated.

LEAD 8680 Site-Based Management  3-0-3
Prerequisite: RSCH 8000. Knowledge and skills for implementing shared decision-making, group goal-setting, team-building, and site-based management will be addressed. Skills and procedures for implementing site-based management will be developed.

LEAD 8850 Directed Study in Educational Leadership  1 to 3 hours credit
Prerequisite: RSCH 8000. This course allows intensive study in the student’s field of specialization to meet individual needs and interests.

LEAD 8901 Practicum  3 hours credit
Prerequisite: RSCH 8000, LEAD 8200, LEAD 8300, LEAD 8400, LEAD 8600. This course provides supervised application of leadership competencies to the resolution of problems in an educational setting.

LEAD 8999 Thesis  3 hours credit
Prerequisite: LEAD 8901. This course provides a supervised capstone field-based project involving school improvement.

LEAD 9000 Special Topics in Educational Leadership  3 hours credit
Advanced study focusing on public school improvement and or the improvements of school leaders through student-designed projects, research, or practica that address the program’s conceptual framework.

LEAD 9010 Instructional Leadership for School Administrators  2-0-2
Focus on the theoretical and practical knowledge base in educational leadership and the skills and processes needed for school improvement. Emphasis will be placed on leadership for instruction and learning to meet the needs of a diverse community of learners.

LEAD 9020 Planning for Instructional Leaders  2-0-2
Theoretical and practical aspects of change, with emphasis on the knowledge and skills to plan for change in an efficient, effective, and systematic fashion for instructional improvement in schools.

LEAD 9030 Leadership Problems: Interdisciplinary Analysis  2-0-2
Prerequisite: LEAD 9010, LEAD 9020. The focus of this course is on the application of interdisciplinary analysis and leadership skills to the resolution of educational problems and issues.

LEAD 9870 School Organizational and Cultural Studies  3-0-3
Prerequisite: LEAD 9800, RSCH 9820, RSCH 9840, RSCH 9860. Simulation and field practice in developing and implementing educational research on the effects of school organization and culture.

MATH: MATHEMATICS

MATH 5010 History of Mathematics  3-0-3
Prerequisite: MATH 2261. A study of the development of mathematics from primitive times to the twentieth century; including numeral systems, arithmetical methods, origins of algebra, geometry, trigonometry, analytic geometry, calculus; and selected topics from modern mathematics.

MATH 5040 Set Theory  3-0-3
Prerequisite: MATH 2262. Propositional and predicate logic; mathematical induction. Logic and structure of sets as related to mathematical proof. Relations, and cardinality.
MATH 5080  Algebraic Structures  3-0-3
Prerequisite: MATH 3040/5040. An examination of the structural foundations of the secondary school algebra curriculum. Topics include rings, integral domains, groups (including groups of transformations) and polynomials. Emphasis on development of students’ deductive reasoning and proof techniques.

MATH 5140 Mathematics for Special Education Teachers  3-0-3
Prerequisite: MATH 1111. Fundamental mathematical concepts beginning with prenumber notions and then extending to number concepts, numeration systems, and computational algorithms for whole and rational numbers; geometry and measurement, and the role of technology in mathematics instruction.

MATH 5160  Mathematics for Early Childhood Teachers  3-0-3
Prerequisite: MATH 1111. A study of concepts and processes underlying the elementary school mathematics curriculum (K-4). Topics include numeration, number systems, estimation, computational algorithms, informal geometry, and measurement.

MATH 5162 Mathematics for Early Childhood Teachers II  2-2-3
Prerequisite: Grade of “C” or higher in Math 3161. An in-depth study of concepts and processes underlying the P-5 school mathematics curriculum, with special emphasis on measurement, geometry, and the fundamentals of probability and statistics. Problem solving and historical context serve as unifying strands.

MATH 5180  Mathematics for Middle School Teachers  2-2-3
Prerequisite: MATH 1111. Concepts and processes that provide the foundation for the middle-grades mathematics curriculum (5-8). Includes an in-depth study of the real number system with emphasis on the rational number system and axiomatic differences among number systems. Other topics include relations and functions, geometry (including coordinate geometry and graphing), measurement, and elementary probability and statistics.

MATH 5190  Algebra and Geometry for Teachers  2-2-3
Prerequisite: Grade of “C” or higher in either MATH 1111 or MATH 1113. An in-depth study of the concepts and processes underlying the middle and secondary school mathematics curriculum, with special emphasis placed upon the integrated development of algebra, geometry, and analytical geometry. Problem solving and historical context serve as unifying strands.

MATH 5340  Ordinary Differential Equations  3-0-3
Prerequisite: MATH 2402 or consent of instructor. Differential equations of first and second order, linear equations of higher order, applications.

MATH 5510  Foundations of Geometry  3-0-3
Prerequisite: MATH 3040/5040. A study of Euclidean and non-Euclidean plane geometry from both synthetic and metric approaches. Topics include concepts related to incidence, betweenness, plane separation and convexity, congruence, and parallelism, with some attention given to geometric transformations.

MATH 5600  Probability and Statistics  3-0-3
Prerequisite: MATH 2261. Descriptive statistics, probability distributions for discrete and continuous random variables, statistical inference, one way analysis of variance, and regression analysis.

MATH 6081  Modern Algebra I  3-0-3
Prerequisite: MATH 4150/6150 or MATH 3040/5040 or consent of instructor. Topics from groups, rings, and fields. Subgroups, cyclic groups, permutation groups, normal subgroups, homomorphisms, Cayley’s and Lagrange’s Theorems, factor groups, abelian groups, direct products. Introduction to rings and fields.

MATH 6082  Modern Algebra II  3-0-3
Prerequisite: MATH 4081/6081. Continuation of MATH 6081 with emphasis on rings and fields. Rings, integral domains, and fields. Vector spaces, extension fields, finite fields.
MATH 6085 Applied Modern Algebra  
Prerequisite: MATH 4081/6081. Lattices, Boolean algebras, semigroups, binary group codes, binary relations, and graphs. Special emphasis is placed on applications.

MATH 6110 Number Theory  
Prerequisite: MATH 2262. Elementary properties of integers including divisibility, unique factorization, progressions and prime numbers. Linear congruencies and residue classes, complete and reduced residue systems, Chinese Remainder Theorem, quadratic residues, law of quadratic reciprocity, Theorems of Fermat and Wilson, Fibonacci and perfect numbers, sums of squares, elementary theory of continued fractions.

MATH 6150 Linear Algebra  
Prerequisites: Either MATH 2150 and MATH 3040/5040 or consent of instructor. Introduction to the theory of vector spaces, with emphasis on finite-dimensional vector spaces, linear systems, matrices, linear transformations, eigenvalues, and related subjects.

MATH 6161 Mathematical Reasoning  
Prerequisite: Grade of “C” or higher in either MATH 3161 or MATH 3180. An in-depth study of concepts and processes underlying the P-8 school mathematics curriculum with special emphasis on informal and formal mathematical reasoning. Problem solving and historical context serve as unifying strands. The analysis and remediation of student errors manifested in the application of conceptual and procedural mathematical knowledge will also be addressed.

MATH 6260 Mathematical Analysis  
Prerequisites: MATH 3040/5040 or consent of instructor or MATH 2263 with a grade of “A” or “B”. A study of the principles of mathematical analysis; point set topology in Euclidean and metric spaces, numerical sequences and series, continuity, differentiation, integration, sequences and series of functions.

MATH 6300 Functions of a Complex Variable  
Prerequisite: MATH 2263. Introductory study of the algebraic and geometric properties of the complex number system and functions of a complex variable. Limits, continuity, and differentiation of complex functions. Analytic functions and the Cauchy-Riemann conditions. Integration of complex functions; Cauchy-Goursat theorem; Cauchy integral formula; the theorems of Morera and Liouville. Taylor and Laurent series expansions. Residues and poles with applications to integration. Conformal mappings.

MATH 6540 Introduction to Topology  
Prerequisite: MATH 3040/5040. The study of point set topology in metric and topological spaces. Open and closed sets, compactness, connectedness, topological mappings, separation, product and functions spaces.

MATH 6621 Mathematical Statistics I  
Prerequisites: MATH 2263 and either MATH 2620 or MATH 3600/5600. Distributions of random variables, conditional probability and stochastic independence, multivariate and some special distributions, and distributions of functions of random variables.

MATH 6622 Mathematical Statistics II  
Prerequisite: MATH 4621/6621. Introduction to statistical inference, sufficient statistic, estimation theory, theory of statistical tests, and inferences about normal models.

MATH 6625 Topics in Applied Statistics  
Prerequisite: MATH 3600/5600 or consent of instructor. Topics in applied statistics will be selected from quality control, sampling theory, nonparametric statistics, experimental design, or regression analysis.

MATH 6651 Numerical Analysis I  
Prerequisites: MATH 2262 and either CS 1301 or CS 1338. Development and implementation of efficient numerical methods; locating roots of nonlinear equations; solving systems of linear equations; numerical differentiation and integration; interpolation; approximation of functions.
MATH 6652 Numerical Analysis II 3-0-3
Prerequisites: MATH 4651/6651 and MATH 3340/5340. Continuation of MATH 6651. Determination of eigenvalues and eigenvectors of matrices; method of least squares, and curve fitting; numerical solutions of ordinary and partial differential equations.

MATH 6901 Operations Research I 3-0-3
Prerequisite: MATH 2150 or MATH 4150/6150. Mathematical aspects and applications of operations research. Topics are selected from linear programming (mainly), integer programming, and dynamic programming.

MATH 6902 Operations Research II 3-0-3
Prerequisite: MATH 3600/5600 or MATH 4621/6621 (Note that MATH 4901/6901 is not a prerequisite). An introduction to stochastic operations research. Topics are selected from stochastic modeling and optimization, probability models, queuing theory, and Monte Carlo simulation.

MATH 6910 Mathematical Models 3-0-3
Prerequisite: MATH 2263 or consent of instructor. An introduction to basic principles and applications of classical mathematical models, optimization models and probabilistic models.

MBA: MASTER OF BUSINESS ADMINISTRATION
(See WMBA for Web-Based MBA Courses)

MBA 7030 Managerial Accounting 3-0-3
Prerequisites: ACCT 2101 and ACCT 2102 or their equivalents. An overview of the role of the accounting function in organizations. Emphasis is placed on analyzing financial information to enhance managerial decision making. The course is designed to assist managers in developing processes for evaluating the merits of historical and forecast data and using such information to add value to organizations.

MBA 7050 Strategic Marketing 3-0-3
Prerequisites: BUSA 2106 and MKTG 3050 or their equivalents. A study of the strategic managerial aspects of marketing. Topics focus on product, price, promotion, and place in the ethical planning, implementing, and controlling of marketing operations.

MBA 7110 Advanced Business Law 3-0-3
A study of a variety of legal topics that provide both an overview and a sensitivity to the multiple legal implications faced by modern businesses. This course is designed to satisfy the needs of students interested in general management and students preparing for professional accounting certification exams.

MBA 7300 Advanced Production Techniques 3-0-3
A survey of current production management systems and philosophies. Topics include current production systems, quality management concepts, and implementation of manufacturing planning and control systems.

MBA 7350 Managerial Finance 3-0-3
Prerequisite: FIN 3350 or equivalent. An advanced study of the theory, principles, and practices that define the finance function in the firm as viewed from the perspective of the financial manager. The topics covered include financial planning, capital budgeting, financing the firm, capital structure management, and dividend policy. Computerized financial models are used to apply financial principles to financial problems and decision making.

MBA 7450 Management Information Systems 3-0-3
Prerequisite: CS 2201 or equivalent. Methodologies and infrastructures used at the project level to select, acquire, install, operate, and upgrade software, hardware, and networking technology, with an emphasis on analysis, design, and implementation. Topics will also include LANs, MANs, WANs, and World Wide Web.
MBA 7500 Managerial Economics 3-0-3
Prerequisites: ECON 2106 and ECON 2105 or their equivalents. The application of economic principles and methodologies to the decision-making process of a business firm. Key topics include optimization and statistical techniques, consumer behavior, market demand analysis for decision making, demand forecasting, production and cost relationships, cost estimation and forecasting, and business pricing decisions.

MBA 7630 Organizational Theory and Behavior 3-0-3
Prerequisite: MGMT 3250 or equivalent. Study of both micro- and macro-organizational behavior. Topics include motivation, leadership, job satisfaction, individual differences, group dynamics, design, organizational structure and processes, organizational politics and organizational conflict.

MBA 7650 Multinational Corporate Finance 3-0-3
Theory and practice of multinational corporate operations. Includes the study of foreign exchange markets, risks associated with foreign exchange transactions, accounting consolidations and foreign operations, and appropriate exchange-risk hedging techniques.

MBA 7660 Advanced Quantitative Methods 3-0-3
Prerequisite: BUSA 2100 or equivalent. A seminar in the procedures, techniques and applications of quantitative methods in business. Topics include classical inference procedures, nonparametric methods, regression analysis, analysis of variance, contingency table analysis, decision theory and an introduction to methods for quality improvement. Computer software will be used in the analysis of data.

MBA 7760 Advanced Retailing 3-0-3
An advanced study of the managerial processes and opportunities in both large and small scale retailing. Topics include location, store design, merchandising and buying. MBA program elective course.

MBA 7770 Distribution Management 3-0-3
A study of the aspects of physical distribution and warehousing of products. Topics include principles of inventory and materials management with emphasis on the role of distribution in the economic development of south Georgia. MBA program elective course.

MBA 7780 Human Resource Management 3-0-3

MBA 7800 International Management 3-0-3
A survey of international management and global business practices from a cross-cultural perspective. Topics include cross-cultural values, perception, job satisfaction, communication, negotiation, leadership, motivation, ethics, group dynamics, and international social and political constraints on domestic management methods.

MBA 7860 New Venture Management 3-0-3
A study of the creation and management of new ventures. Topics include generating and evaluating new business ideas, developing a business plan, starting a new venture in a corporate or independent setting, and managing the start-up and growth phase of operations. MBA program elective course.

MBA 7870 Total Quality Management 3-0-3
A survey of theories and practices associated with quality management. Topics include current quality management practices, tools and procedures for continuing improvement processes, the team approach to quality management, introduction of quality management practices in an organization, and transfer of quality management skills and procedures to customers and suppliers. MBA program elective course.
MBA 7900  Strategic Management  
Prerequisite: MBA 7660, MBA 7050, MBA 7030, MBA 7500, MBA 7630, MBA 7300, MBA 7350, and MBA 7450 or their equivalents or permission from the instructor. An advanced course using concepts of strategic management. Integrates the functional areas of an organization, develops analytical skills, and enhances communication skills. Emphasis is given to the formulation and implementation of strategy in world markets.

MBA 7990  MBA Directed Study  
Directed graduate research or reading in Business. Proper form must be submitted to the Director of the MBA Program at least two weeks before the beginning of the semester.

## MFTH: MARRIAGE AND FAMILY THERAPY

MFTH 6700 Family Sociology  
Also offered as SOCI 6700. The social context of contemporary issues facing families. Includes family history, cross-cultural issues, and research and theory regarding changing gender roles, family violence and abuse, divorce, single-parenting, work families, sexual orientation, non-traditional families and other relevant issues.

MFTH 6800 Orientation to MFT Practice and Ethics  
Introduces students to the basic epistemological issues in marriage and family therapy, history of the field and current developments, professional socialization and organizations, ethics and values associated with the practice of MFT. Self awareness critical to practice is also addressed.

MFTH 6990 Supervisor’s Training in Marriage and Family Therapy  
Limited to graduate students who already hold the master’s degree and are pursuing the status of “Supervisor in Training” through the American Association for Marriage and Family Therapy. Graded “Satisfactory” or “Unsatisfactory.” Offered on an individual basis, readings of supervision, styles, systemic family therapy, and ethics for supervision will be explored.

MFTH 7050 Class, Gender, and Ethnic Issues in Applied Settings  
Also listed as SOCI 7050. Prerequisite: MFTH 6800 or SOCI 7011. An in-depth study of the sensitivities needed by family therapists and other social science practitioners to the issues of social class, gender, and ethnicity. Addresses the interface between professional responsibilities and ethics and the social and political context of treatment. A multicultural perspective is to be developed by each student.

MFTH 7101 Family Systems Theories  
Prerequisite: MFTH 6800. An in-depth study of family systems theory. Emphasis on the major schools of thought included in a systems analysis of the family and current issues and ideas within family systems discourse.

MFTH 7102 Interventions in MFT  
Prerequisite: MFTH 7602. A review of the various intervention techniques employed by the major theoretical approaches to MFT. Emphasis on skill development, video and role-playing demonstrations, and linking practice to theory and appropriate treatment goals.

MFTH 7103 Advanced Theories Seminar  
Prerequisite: MFTH 7102. A series of seminars that allow students to develop in depth understanding of at least two theoretical approaches to MFT. Examples of offerings include structural/strategic, experiential, family of origin, narrative/constructivism, feminist, solution-oriented. May be repeated.
MFTH 7200  Research in Marriage and Family Therapy  3-0-3
Prerequisite: a statistics course. Quantitative and qualitative methods for research design and data analysis in marriage and family therapy. Emphasis on current outcome and process studies and on critical evaluation and application of research data.

MFTH 7350  Legal Issues in MFT  1-0-1
Prerequisite: MFTH 6800. Legal responsibilities and liabilities in the practice of family therapy. Addresses issues such as limits to confidentiality, therapist liability, and client privilege. Includes working with the legal system and relevant aspects of family law.

MFTH 7400  Psychopathology & Pharmacology in MFT  3-0-3
Prerequisite: MFTH 6800. Psychological, biological, and medical issues in the practice of MFT and an introduction to pharmacology. Emphasis on DSM IV diagnosis within a systemic context and collaboration with other mental health professionals.

MFTH 7500  Development in the Family System  3-0-3
Also offered as SOCI 7500. Human growth and development within the family system. Includes theories of individual development, developmental tasks over the family life cycle, normative and non-normative change, processes of divorce and remarriage, and social, economic, and ethnic influences on the family life cycle. Implications for practice emphasized.

MFTH 7510  Human Sexuality and Gender  3-0-3
The cultural, social, physical, psychological, and interpersonal aspects of human sexuality and gender. Includes gender role socialization and the development of gendered identities, sexual functioning and attraction, sexual orientation, and problems related to sex and gender.

MFTH 7550  Family Stress and Crisis  3-0-3
Understanding normative and catastrophic stress, trauma, and crisis across the lifespan from a family systems perspective. Focus on approaches to prevention and intervention with families, agencies, and communities.

MFTH 7600  Practicum in Marriage and Family Therapy  0-12-6
Prerequisite: MFTH 7102 and approval of the MFT Faculty. Supervised experience in the practice of marriage and family therapy. Includes practice and live supervision at the MFT Training Clinic as well as experience in community placements. Requires a minimum of 20 hours per week. Must be taken three successive semesters for a total of 500 hours of direct client contact.

MFTH 7601  Treatment Issues in Family Therapy  3-0-3
Prerequisite: MFTH 7102. Applications of family systems approaches to the treatment of issues facing families in crisis and transition. Addresses grief and loss, substance abuse, family violence and abuse, child and adolescent behavioral problems, and chronic physical and mental illness. Emphasis on conceptualizing and treatment planning.

MFTH 7602  Couples and Sex Therapy  3-0-3
Prerequisite: MFTH 7102. Treatment techniques for intimate relationships. Emphasis on premarital and commitment issues, anger and conflict, gender and intimacy, and techniques for treating sexual dysfunctions.

MFTH 7650  Special Topics in MFT  1-0-1
A rotating series of seminars addressing important contemporary issues in the field of marriage and family therapy. Examples of topics include working with children, working with adolescents, spirituality, family violence, and substance abuse. May be repeated for credit.

MFTH 7700  Assessment in Marriage and Family Therapy  3-0-3
Prerequisites: MFTH 7101 and MFTH 7500. How to assess family processes within a developmental context. Models for assessing family functioning and use of individual and family assessment instruments will be included.
MFTH 7880  Professional Ethics Seminar 1-0-1
Addresses professional issues in the workplace. Includes marketing oneself, politics of the workplace, professional licensure and clinical membership, working in interdisciplinary teams, professional wellness, and the ethics, values, and decision-making associated with current practice issues.

MFTH 7980  Internship in Marriage and Family Therapy 0-2-1 to 0-10-5
Prerequisite: MFTH 7600. Supervised experience in the practice of marriage and family therapy in a community placement. Requires enough direct contact hours additional to practicum to total 500 before graduating.

MFTH 7990  Directed Study in Family Therapy 1-0-1 to 3-0-3
Prerequisite: permission of instructor. Specialized study in an area of Marriage and Family Therapy under the direction of a faculty member.

MFTH 7999  Thesis 1-0-1 to 6-0-6
Prerequisite: Approval of student’s graduate committee. Independent research in an area related to the practice of marriage and family therapy.

MGED: MIDDLE GRADES EDUCATION

MGED 7000  Special Topics in Middle Grades Education 1-0-1 to 3-0-3
Studies of selected topics in middle grades education. Only one special topics course may be used in a program of study.

MGED 7010  Personal Development of Transescents 3-0-3
Emphasizes learning for personal meaning and involvement, focusing upon goals usually classified in affective domain such as self-awareness, value clarification, interpersonal relations, and moral reasoning as related to middle grades child.

MGED 7020  Curriculum in the Middle Grades 3-0-3
Reviews the current status and trends in middle grades concept as evidenced in practice. Analysis of middle grades curriculum and its unique construction and planning.

MGED 7030  Teaching Strategies 3-0-3
Designed to provide classroom teacher with theoretical, practical, and research bases for consideration in selection of instructional strategies based on unique function of content as it relates to intellectual needs of middle grades child.

MGED 7040  Evaluation and Assessment 3-0-3
Focuses primarily on the basic concepts, methods, and tools of assessment or evaluation. It is designed so professional educators can combine their initial experience and understanding of middle grades child with information regarding their past performances to assess children’s abilities.

MGED 7200  Language Arts Methods for Middle Grades Education 3-0-3
A study of expressive and receptive skills of communication in middle grades with emphasis upon teaching extended skills in listening, speaking, reading, and writing.

MGED 7210  Literature for Interdisciplinary Instruction for Middle Grades 3-0-3
A survey of literary forms appropriate for interdisciplinary instruction for middle grades (4-8).
MGED 7300  Social Studies Methods for Middle Grades Education 3-0-3  
Trends in social studies, curriculum of middle grades, with emphasis on selection of content, grade placement of concepts and activities, methods of teaching, needed equipment, and community resources.

MGED 7310  Methods of Teaching Geography in the Middle Grades 3-0-3  
Methods and materials used in teaching geography. Concepts include land and water forms, relief features, direction and distance, social data, economic information, political information, scientific information and human factors.

MGED 7320  Children of Diverse Cultures 3-0-3  
General introduction to the study of methodology, materials, and evaluative strategies for teaching children of minority cultures in service area.

MGED 7400  Methods and Materials of Teaching Mathematics in the Middle Grades 3-0-3  
Overview of curriculum, leading theory and research in mathematics education, survey of topics for grades 4-8 in terms of teaching strategies.

MGED 7410  Applications of New Technology In Teaching Middle Grades Mathematics 3-0-3  
Integration of technology into mathematics teaching for grades 4-8. Calculators and computers as tools for instruction across the mathematics curriculum.

MGED 7420  Teaching Problem Solving in Middle Grades Mathematics 3-0-3  

MGED 7430  Teaching Geometry and Measurement in the Middle Grades 3-0-3  
Methods and materials for instruction in informational geometry and measurement, particularly metric system. Teaching techniques applied to both solid and planar geometry, including topology, tessellations, and transformational geometry.

MGED 7440  Teaching of Probability and Statistics in the Middle Grades 3-0-3  
Experiential-based activities of teaching probability and statistics in grades 4-8. Data collection, organization, graphical presentation and interpretation. Methods and materials for teaching probability, with an emphasis on application.

MGED 7500  Science Methods for Middle Grades Education 3-0-3  
Trends in science curriculum of middle grades, with emphasis on selection of content, concepts and activities, methods of teaching, equipment, and community resources.

MGED 7520  Life Science for Middle Grades 3-0-3  
Life science concepts and methods of teaching these concepts in middle grades. Topics include: living world, diversity of life, heredity, cells, interdependence of life, flow of matter and energy, history of life, and human organism.

MGED 7600  Practicum in Middle Grades Education 1-0-1 to 3-0-3  
Designed to provide support for middle grades beginning teachers (0–3 years experience). Encompass practical applications of organization and management, educational planning based on assessments, teaching and learning strategies, and behavioral management.

MGED 7620  Renewal Institute for Practicing Educators 3-0-3  
Provides support for experienced middle grades teachers (5 or more years of experience) who are seeking renewal of philosophy, pedagogy and personal development.

MGED 7650  Issues and Trends Field Based Project 3-0-3  
Prerequisite: Completion of primary concentration area and core courses. Individual professional investigation of issues and trends in academic content area at a site. Development of an academic plan.
MGED 7660  Internship in Middle Grades Education  
Prerequisite: MGED 7650.

MGED 7900  Directed Study in Middle Grades Education  1-0-1 to 3-0-3  
Prerequisites: 15 Hours of Graduate Work with a “B” average. Opportunity for intensive individual study in the student’s field of specialization of an area peculiar to his or her needs.

MGED 7910  Educational Workshop  
A concentrated study of contemporary problems and issues relevant to middle grades.

MGED 8000  Special Topics in Middle Grades Education  2-0-2 or 3-0-3  
Studies of selected topics in middle grades education. Only one special topics course may be used in sixth year program.

MGED 8100  Applied MGED Program Development and Leadership  3-0-3  
Prerequisites: RSCH 8000. Is designed to provide the Educational Specialist student with application of program development and leadership skills at classroom, team, and school levels. A major emphasis will be needs assessment of existing programs, selection of an area that needs improvement, and development of a plan for improvement. Integrated throughout will be criteria for being a successful change agent at different levels.

MGED 8110  Review and Critique of Educational Literature in Middle Grades Education  3-0-3  
Prerequisites: RSCH 8000, MGED 8100. Review and critique of modern issues and trends in middle grades education.

MGED 8900  Symposium  1-2-2  
Prerequisites: RSCH 8000, MGED 8100, MGED 8110. Designed to provide opportunities for students to present, and defend a selected professional research project

MGED 8990  Middle Grades Education Research Project  1-4-4  
Prerequisites: RSCH 8000, MGED 8100, MGED 8110, MGED 8900. Is the fifth phase of the action research and leadership component for the Educational Specialist degree.

MLIS: MASTER OF LIBRARY AND INFORMATION SCIENCE

MLIS 7000  Foundations of Library and Information Science  3 hours credit  
An introduction to the library and information science field, its history, and future directions. The focus is on the history, concepts, and technological development of the discipline. Students will gain familiarity with library and information theory, the discipline and sub-disciplines within the information sciences, and ethical practices and standards.

MLIS 7050  Portfolio Development  1 to 2 hours credit  
Prerequisite or corequisite: MLIS 7000. Preparation and presentation of a professional portfolio in partial fulfillment of the requirements of the MLIS degree. Students must enroll for one credit of Portfolio Development in the first semester of their program, for one credit after the completion of 19 credit hours, and one or two credits in the final semester of their program. Four credit hours are required and will be counted toward the degree.

MLIS 7100  Information Sources and Services  3 hours credit  
An introduction to concepts and processes in reference and information science and to fundamental information sources and services provided by libraries and information organizations. An overview of the reference function includes the history and future of reference service, question negotiation, information needs analysis, effective research strategies, evaluation of information sources in various formats, and ethics of information services.
MLIS 7120 Government Information Sources 3 hours credit
Use of and access to government documents, defining government documents, how they are generated or created, how and who uses them, how and where to find them. The course addresses government documents at the federal, state, and local levels as well as documents of international organizations (UN, EU, etc.) and foreign governments.

MLIS 7200 Management of Information Centers 3 hours credit
An introduction to the functions of library management and its underlying theoretical concepts. This course provides an overview of the history of management, an introduction to management theory and functions, including planning, leading, organizing, staffing, controlling, budgeting, human resource issues, and an understanding of management as a system involving all staff.

MLIS 7300 Cataloging and Classification 3 hours credit
Prerequisite or Corequisite: MLIS 7000. An introduction to the organization of recordable knowledge, with emphasis on library cataloging and classification. Students will examine current applications of Anglo-American Cataloguing Rules, MARC formats, Library of Congress and Sears Subject Headings, Dewey Decimal Classification, and Library of Congress Classification. Metadata initiatives and the interpretation of technical documentation will be considered.

MLIS 7330 Cataloging the Web (Web-based Course) 3 hours credit
Methodologies and metadata developed for cataloging the Web and other digital collections, including MARC, archival XML systems,Dubic Core, and CORC.

MLIS 7650 Information and Ethics (Web-based Course) 3 hours credit
An introduction to the basic ethical precepts of the information professions and the importance of ethics. The course examines differences among ethical, legal, moral, and religious systems and includes a case-study methodology to explore ethical situations in the professional practice, drawing upon lessons offered by relevant professional organizations and their ethics codes.

MLIS 7700 Research Methods (Web-based Course) 3 hours credit
An introduction to the various approaches to social science research and research methods. Students will perform small-scale research projects and develop skills in the research uses of libraries and the needs of library patrons.

MLIS 7800 Capstone 3 hours credit
Taken during the final semester of study. Required for partial fulfillment of the requirements for the MLIS degree. Emphasis will be on synthesis of knowledge, honing writing and presentation skills, and creating a professional development plan.

MLIS 7950 Independent Study in Library and Information Science 3 hours credit
Supervised readings in areas of library and information science not normally available in regular course offerings, with regular conferences between instructor and student.

MLIS 7960 Supervised Fieldwork 3 hours credit
Prerequisite: MLIS 7000 and consent of instructor. Graded “Satisfactory” or “ Unsatisfactory.” A minimum of 120 hours in an approved library or information center. Learning objectives that are specific to the individual student’s interests and goals will be identified collaboratively by the student, the on-site supervisor, and the instructor.

MLIS 7999 Special Topics in Library and Information Sciences 3 hours credit
Advanced study of specific issues in library and information science. Course may be repeated under different topics.
MSED: MIDDLE GRADES AND SECONDARY EDUCATION

MSED 7000  Professional Development Seminar I  2-0-2
The self-assessment of individual student understanding and application of master teacher outcomes. Provides the basis for an individual program of study based on individual needs.

MSED 7010  Current Issues and Trends in MSED  2-0-2
Advanced study of trends and issues in middle grades and secondary education.

MSED 7410  Techniques For Instructional Support  3-0-3
A study of techniques and models for the observation, analysis, and supervision of the teaching process. Includes communication and conferencing; self-analysis; mentoring; peer coaching; cooperative planning; and roles and responsibilities.

MSED 7420  Internship In Instructional Support  3-0-3
Prerequisite: MSED 7410 or permission of instructor. Graded “Satisfactory” or “Unsatisfactory.” A field-based demonstration of instructional supervision competencies.
The student will be monitored by a university supervisor.

MSED 7650  Teaching Practicum  2-0-2
Prerequisite: MSED 7000

MSED 7800  Professional Development Seminar II  2-0-2
Prerequisites: MSED 7000, MSED 7010, and MSED 7650. Analysis of individual’s teaching plan in relationship to National Board Standards, master’s program outcomes, and school improvement plans.

MSED 8100  Applied MSED Program Development and Leadership  3-0-3
Designed to provide students with application of program development and leadership skills. Emphasis is on school improvement and instructional change.

MSED 8110  Review and Critique of MSED Literature  3-0-3
Prerequisite: MSED 8100. Review and critique of trends and issues in MSED focusing on school improvement.

MSED 8900  Action Research Project in MSED  1-6-4
Prerequisite: MSED 8100, MSED 8110. Completion and reporting of an action research project.

MSED 8999  Symposium in MSED  2-0-2
Prerequisite: MSED 8100, MSED 8110, MSED 8990 or permission of department head. Presentation and defense of a selected professional action research project.

MUE: MUSIC EDUCATION

MUE 5100  Arranging for School Band, Chorus, and Orchestra  2-0-2
Prerequisites: MUSC 2012 and 2052. Basic techniques of scoring for school choral and instrumental groups. Three periods a week.

MUE 5640  Music for Teachers  3-0-3
Music materials and methods for the elementary teacher in the school. Not open to music majors.

MUE 7000  Issues and Trends in Music Education  3-0-3
Current trends and issues of contemporary music education.

MUE 7600  Instrumental Music Curriculum  3-0-3
Materials and teaching techniques relative to instrumental music education.

MUE 7610  Choral Music Curriculum  3-0-3
Materials and teaching techniques relative to choral music education.

MUE 7640  General Music Curriculum  3-0-3
Review of current methods and approaches of general music education, including multicultural approaches to music teaching.
MUE 7660 Psychology of Music  
Psychological foundations of music teaching and learning, including music for the exceptional child.

MUE 7900 Directed Study in Music Education  
Prerequisite: Completion of the required core courses in education and music. A capstone research course resulting in the proposal and preparation of a thesis. A defense of the thesis is required.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MUE 7999</td>
<td>Thesis</td>
<td>3-0-3</td>
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</tbody>
</table>

MUSC: MUSIC

MUSC 5110 Jazz Arranging  
Prerequisite: MUSC 2030 and 1170, or permission of instructor. The application of analytic techniques to the study of musical scores.

MUSC 5170 Music Composition I  
Prerequisite: MUSC 1012 or permission of the instructor. Foundations in music composition employing both traditional and contemporary techniques.

MUSC 5430 History of Jazz  
A comprehensive study of the development of jazz and ragtime from its African origin through present day. Emphasis on evaluation of stylistic, trends, and techniques. Students will write a major term paper using a specific style period as subject matter. Open to both music and non-music majors.

MUSC 5500 Band Literature  
Prerequisite: MUSC 1100. Study of styles and eras of band literature appropriate for a variety of ensembles.

MUSC 5510 Choral Literature  
Prerequisite: MUSC 1100. Study of styles and eras of choral literature appropriate for a variety of ensembles.

MUSC 5520 Symphonic Literature  
Prerequisite: MUSC 1100. A survey of Western symphonic music.

MUSC 5960 Opera Seminar  
The study and analysis of scenes from opera and operetta.

MUSC 6450 History of Music to 1825  
Prerequisite: MUSC 1100 or permission of instructor. History of music from medieval times through the Classical era.

MUSC 6460 History of Music Since 1825  
Prerequisite: MUSC 1100 or permission of instructor. A survey and study of the various trends and movements in music in the romantic era and twentieth century.

MUSC 6510 Song Literature I  
Survey course in art song literature. MUSC 6510 peruses the literature from the Renaissance through the German Lieder School spanning the nineteenth century and the first half of the twentieth century.

MUSC 6520 Song Literature II  
Survey course in art song literature. MUSC 6520 peruses the nineteenth and twentieth-century French, Spanish, English, and American song schools.

MUSC 6540 Piano Literature I  
Survey course in piano literature. The keyboard instruments and literature of the Renaissance, Baroque, and Classical eras.
MUSC 6550  Piano Literature II  1-0-1
Survey course in piano literature. The piano literature of the Romantic period and representative repertory of the last one hundred years.

MUSC 6570  Organ Literature I  1-0-1
The study of organ literature and organ design from the origins of the instrument to the time of J. S. Bach.

MUSC 6580  Organ Literature II  1-0-1
The study of organ literature and organ design from the time of J. S. Bach to the present.

MUSC 6760  Jazz Pedagogy  1-0-1
The study of jazz methods and jazz materials, including lab teaching experience.

MUSC 7010  Music Theory  3-0-3
Graduate survey in music theory.

MUSC 7020  Music History  3-0-3
Graduate survey in music history.

MUSC 7030  The Science of Music  3-0-3
Scientific aspects of music with an emphasis upon electronic treatments of sound.

MUSC 7040  Computer Applications in Music  3-0-3
This course is an introduction to the basic skills in computer applications for music, including MIDI (Musical Instrument Digital Interface).

MUSC 7530  Chamber Music  3-0-3
Selected studies in the history and theory of chamber music masterworks.

MUSC 7650  Conducting  3-0-3
Techniques in conducting.

**APPLIED MUSIC (MUSC)**

Student enrolling in Applied Music will be assigned to an instructor by the Head of the Music Department, and a list of assignments will be posted in the Music Department Office on the day following registration. Student must arrange for a lesson time with the assigned instructor by the end of the second day of classes. Students not scheduled by the end of the second day of classes will be dropped from the course.

**Secondary Applied:** These courses award one credit hour each semester, and one thirty-minute lesson will be scheduled each week. Requirements will be determined by the instructor. Secondary applied lessons are available to any student regardless of major, depending on the availability of faculty.

**Secondary Applied**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>MUSC 5210 Piano Graduate</td>
<td>0-1-1</td>
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<tr>
<td>MUSC 5310 Organ Graduate</td>
<td>0-1-1</td>
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<tr>
<td>MUSC 5410 Voice Graduate</td>
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<tr>
<td>MUSC 5610 Brass Graduate</td>
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<tr>
<td>MUSC 5910 Woodwinds Graduate</td>
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<tr>
<td>MUSC 6310 Percussion Graduate</td>
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<tr>
<td>MUSC 6410 Strings Graduate</td>
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</table>
MUSC 5810  **Chamber Singers**  0-2-1
A selected ensemble emphasizing choral and vocal chamber music repertoire. Selection by audition only. Membership open to all VSU graduate students.

MUSC 5820  **Concert Choir**  0-3-1
Open to any VSU student by permission of the instructor.

MUSC 5830  **The Spotlighters**  0-2-1
A select choral ensemble emphasizing popular, jazz, blues, and show tune repertoire. Selection by audition only.

MUSC 5840  **Opera and Musical Theatre**  0-2-1
Music drama production and ensemble work. Preparation of scenes and full-scale productions.

MUSC 5850  **Concert Band**  0-3-1
Open to any VSU student by permission of the instructor.

MUSC 5860  **Orchestra**  0-3-1
Open to VSU students with permission of the instructor.

MUSC 5870  **Jazz Ensemble**  0-3-1
Selection by audition only.

MUSC 5880  **Marching Band**  0-3-1
Performance at all football games and various exhibitions. Auditions required for danceline, color guard, and majorette. Fall semester only.

MUSC 5890  **Instrumental Ensembles**  0-2-1
Study and performance of repertoire for a variety of combinations of instruments. Open by permission of instructor.

MUSC 6870  **Jazz Combo**  0-2-1
Study and performance of a wide variety of jazz styles for 5-8 member ensemble. Selection by audition only.

MUSC 6880  **University Community Band**  0-3-1
Study and performance of standard band literature. Open to VSU students and members of the community by permission of the instructor.

MUSC 6890  **Vocal Chamber Ensembles**  0-1-1
Ensemble performance in musicals, opera, and other such events in conjunction with the departments of music and theatre.